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AMENDMENT **MP20 RECEIPT** 03 JAN 2006

(Amendment Under the Regulations of Article 11)

To: Commissioner of the Patent Office

1. Identification of the International Application

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4. Item to be amended:

Description and Claims

5. Subject matter of amendment

- (1) Amend the content of the present invention found on pages 4 and 5 of the Description in accordance with the Claim amendments mentioned below.
- (2) Correct an error, " α -lactam antibiotics" found on page 9, line 12 of the Description, by replacing with "penem antibiotics".
- (3) Cancel Claims 1 and 4 found on page 24 of Claims. Amend "The remedy for sarcoidosis according to claim 1, wherein the *Propionibacterium acnes*-targeting antibiotic is one or more antibiotics selected from penicillin antibiotics, cephalosporin antibiotics, macrolide antibiotics, lincomycin antibiotics, and tetracycline antibiotics", found in Claim 2 to "A remedy for sarcoidosis containing one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics, as an active component"; amend "The remedy for sarcoidosis according to claim 1 or 2, wherein the *Propionibacterium acnes*-targeting antibiotic is minocycline hydrochloride, clindamycin, ampicillin, or clarithromycin" found in Claim 3 to "The remedy for sarcoidosis according to claim 1, wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin"; amend "The method for treating sarcoidosis according to claim 4, wherein the *Propionibacterium acnes*-targeting antibiotic is one or more antibiotics selected from penicillin antibiotics, cephalosporin antibiotics, macrolide antibiotics, lincomycin antibiotics, and tetracycline antibiotics" found in Claim 5 to "A method for treating sarcoidosis wherein one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics are administered to a sarcoidosis patient"; and amend "The method for treating

sarcoidosis according to claim 4 or 5, wherein the Propionibacterium acnes-targeting antibiotic is minocycline hydrochloride, clindamycin, ampicillin, or clarithromycin" found in Claim 6 to "The method for treating sarcoidosis according to claim 3, wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin".

6. List of attached documents

- (1) Pages 4 and 5 of the Description
- (2) Page 9 of the Description
- (3) Page 24 of Claims

granuloma formation was enhanced cell-dose-dependently, and the number of BAL cells was also increased.

(7) With the same objective as that of the above-mentioned (6), the effect of antibacterial operation to *P. acnes* on the pulmonary granuloma formation was examined. In groups administered with minocycline hydrochloride or clindamycin, whose antibacterial effect on *P. acnes* has been known, the total number of BAL cells and the number of CD4⁺ cells were decreased, and also, granuloma formation was suppressed in comparison to groups administered with PBS.

Disclosure of the Invention

The present invention relates to: (1) a remedy for sarcoidosis containing one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics, as an active component; and (2) the remedy for sarcoidosis according to (1), wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin.

The present invention further relates to: (3) a method for treating sarcoidosis wherein one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics are administered to a sarcoidosis patient; and (4) the method for treating sarcoidosis according to (3), wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin.

Brief Description of Drawings

Fig. 1 is a set of photographs showing the experimental results indicating the existence of *P. acnes* in the alveolar of the healthy mouse lung.

a,b: Immunostaining of *P. acnes* in the alveolar of the normal mouse lung

(brown). High magnification of *P. acnes*-bearing cells. Scale bar: 5 μm (a), 20 μm (b).

c to e: Double staining of *P. acnes* (brown) and F4/80 (blue) (c), double staining of *P. acnes* (brown) and CD11c (blue) (d), double staining of *P. acnes* (brown) and DEC205 (blue) (e). Only F4/80-presenting cells phagocytized *P. acnes*. Scale bar: 20 μm .

f: Detection of *P. acnes* in the lower airway of the lung of healthy mice. Total RNAs extracted from live *P. acnes* were used as a positive control, and normal peripheral mononuclear blood cells were used as a negative control. Data shown are taken from representatives of three or more independent experiments. $n = 5$. Mice were numbered # 1 to 5.

Fig. 2 is a set of photographs showing the results of immune response to *P. acnes* in the normal peripheral LNs.

a: Detection of 16s ribosomal RNA of *P. acnes* in the normal peripheral LNs. Total RNAs extracted from live *P. acnes* were used as a positive control.

(PCG), ampicillin (ABPC), bacampicillin (BAPC), ciclacillin (ACPC), piperacillin (PIPC); cephem antibiotics such as cefditoren pivoxil (CDTR-PI), cefetamet pivoxil hydrochloride (CEMT-PI), cefdinir (CFDN), cefixime (CFIX), cefcapene pivoxil (CFPN-PI), cefpodoxime proxetil (CPDX-PR); penem antibiotics such as faropenem sodium (FRPM), imipenem/cilastatin (IPM/CS), meropenem (MEPM), panipenem/betamipron (PAPM/BP); cephalosporin antibiotics such as ceftazidime (CAZ), cefalotin (CET), cefazolin (CEZ), cefotiam (CTM), cefotaxime (CTX), cefoperazone (CPZ), ceftizoxime (CZX), cefmenoxime (CMX), cefpirome (CPR), cefepime (CFPM), cefozopran (CZOP); macrolide/lincomycin antibiotics such as clindamycin (CLDM), lincomycin (LCM), erythromycin (EM), clarithromycin (CAM), rokitamycin (RKM); tetracyclines antibiotics such as minocycline (MINO), doxycycline (DOXY); quinolone, chloramphenicol (CP); rifamycin

CLAIMS

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IAP20 Rec'd PCT/PTO 03 JAN 2006

1. (Cancelled)
2. (Amended) A remedy for sarcoidosis containing one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics, as an active component.
3. (Amended) The remedy for sarcoidosis according to claim 1, wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin.
4. (Cancelled)
5. (Amended) A method for treating sarcoidosis wherein one or more antibiotics selected from penicillin antibiotics, penem antibiotics, cephalosporin antibiotics, macrolide antibiotics, and lincomycin antibiotics are administered to a sarcoidosis patient.
6. (Amended) The method for treating sarcoidosis according to claim 3, wherein the antibiotic is clindamycin, ampicillin, meropenem, or clarithromycin.